

REMARKS

Applicants thank the Examiner for the thorough consideration given the present application. Claims 1, 3, 4 and 6-11 are currently being prosecuted. The Examiner is respectfully requested to reconsider his rejections in view of the amendments and remarks as set forth below.

Drawings

The Examiner objected to the drawings due to a number of informalities. Applicants are submitting herewith corrected drawings in response thereto. First, in regard to the cross-sectional line names, Figures 1 and 5 now indicate these cross-sectional lines by Roman numerals. It is noted that the Examiner referred to Figure 6, but it is assumed that Figure 5 was meant instead. The descriptions on pages 2 and 3 have also been amended appropriately. In regard to Figure 2, the numeral 31 has now been changed to remove the parenthesis and add a lead line. In Figure 3, the parenthesis have been removed and numeral "44" has been removed so that the lead lines extend to 44a and 44b. In Figure 1, the underlining under numeral 1 has been removed. In Figures 5 and 6, numeral "1" has been added.

The Examiner also objected to the use of brackets in regard to numeral 2 in Figure 2 and numeral 50 in Figure 5. Applicants submit that this is not incorrect, but is a standard manner of indicating some element which has separate parts which are separately indicated. The Examiner is invited to see, for example,

Figure 3 of the Shimizu et al. reference which utilizes this arrangement in regard to Figure 24. This is likewise used in Figure 1 of the Buell (4,397,645) reference. Accordingly, these changes have not been enacted.

Objection to the Specification

The Examiner required changes in the Abstract in line 6 and on page 1, line 17. By way of the present Amendment, Applicants have rewritten the Abstract into several separate sentences and have made the change required by the Examiner. Page 1 has also been amended to make this line more clear.

Objections to the Claims

The Examiner objected to a number of claims due to various informalities. These have all been corrected as indicated by the Examiner.

Rejection Under 35 U.S.C. § 112, Second Paragraph

Claims 1-9 stand rejected under 35 U.S.C. § 112 as being indefinite. This rejection is respectfully traversed.

The Examiner has pointed out a number of instances of indefiniteness. In regard to claim 1 line 2, and claim 4 line 3, "thereof" has been changed to "of said article." Claim 4, line 8 now refers to the fiber aggregate rather than "that." Claim 6, line 6 has also been changed to specifically point out that the compressed parts and noncompressed parts or weakly compressed parts alternate.

The Examiner has referred to claim 2, lines 3 and 4 regarding the extension portion extending parallel to the respective longer side. Applicants have not changed this language. Applicants are unsure which language the Examiner is talking about since the only indication of the longer side is in line 2 of claim 2. The Examiner is requested to be more specific in this regard.

Rejection Under 35 U.S.C. § 102

Claims 1 and 2 stand rejected under 35 U.S.C. § 102 as being anticipated by Correa et al. (5,312,386). Claims 1-3 stand rejected under 35 U.S.C. § 102 as being anticipated by Shimizu et al. (6,514,234). These rejections are respectfully traversed.

The Examiner points out that each of these references show an absorbing layer, leakproof layer, gathers, an elastic extensible portion and ridges. In regard to Shimizu et al. the Examiner also points that it also includes upright portion 16 and non-woven fabric 19. The Examiner also points out that the upright portion connects to the middle "region."

Claim 1 has now amended to include the limitations of claim 2 and to recite the combination of elements including the leakproof layer, the absorbing layer and gathers, with the gathers having an upright portion and an elastically extensible portion with the extensible portion being parallel to the absorbing layer. The extensible portion is made of a sheet and at least one elastic member which is fixed discretely to the sheet in its stretched state so that the parts which are not

fixed are raised by contraction to form hollow ridges. Applicants submit that the Correa et al. and Shimizu et al. references do not show this combination of elements.

In particular, these references do not show the elastically extensible portion being parallel to the absorbing layer. In Correa et al, the gathers only extend at a 30° angle to the absorbing layer. Also, there are no upright portions in this reference. The gather of Correa et al. is parallel to the standing portion and the absorbing element and is not divided into an elastically extensible portion providing a planar contact with the wearer's skin. In addition, the object of the gather in Correa is provide the pad with a boat-like configuration giving no consideration that the gather has a comfortable feel and has a shape retention. In the Shimizu et al. reference, there is an upright portion 16, but the sealing surface zone 20 is not parallel to the absorbing layer before being worn. The elastic member is not fixed to a sheet member discreetly and there are no ridges which are regularly arranged. The gather is just an irregular protrusion and depression formed by a conventional gathering method. Thus, the Correa et al. reference does not show this arrangement at all and the Shimizu et al. reference shows the extensible portion at a different angle than that presently claimed. This difference in angle directly relates to the comfort of the wearer. It is further noted that the Shimizu et al. reference relates to a diaper rather than to a sanitary napkin. While these two different types of articles are similar in construction, the exact fit that is necessary is different and accordingly having the particular angle of the

extensible portion as presently claimed would not necessarily produce a comfortable fit in a diaper device. Accordingly, it would not be obvious to modify the Shimizu et al. reference to have this arrangement of the upright portion and extensible portion. For this reason, Applicants submit that claim 1 is allowable.

Claim 3 depends from claim 1 and as such are also considered to be allowable. Claim 3 further describes the upright portion as being connected to the middle of the extensible portion. This is also not seen in the references. Accordingly, this claim is additionally allowable.

Rejections Under 35 U.S.C. § 103

Claims 4, 8 and 9 stand rejected under 35 U.S.C. § 103 as being obvious over Hedlund et al. (5,407,438) in view of Buell (4,397,645). This rejection is respectfully traversed.

The Examiner relies on the Hedlund et al. device to show the basic structure except for the fiber aggregate forming ridges. The Examiner states that the standing gathers are T shaped formed by edges of 1 and bands 14 and 15. The Examiner relies on the Buell reference to teach a leak resistant member having a degree of comfort due to pillows of low density. The Examiner believes that it would have been obvious to utilize the band taught by Buell in the Hedlund device in order to prevent leakage but provide comfort.

Claim 4 now includes the limitations of claim 5 and describes an absorbent article having a combination of elements including an absorbing layer, a leakproof

sheet and gathers where the gathers have an upright portion and an extensible portion and where the extensible portion comes into planar contact with a wearer's skin while worn and the upright portion extends between the absorbing layer or a portion near the longer side edge of the absorbing layer and the elastically extensible portion. The extensible portion is made of a fiber aggregate with at least one elastic member and a large number of ridges, with the aggregate having ridges with lower density than the aggregate forming the valleys between ridges. The two fiber aggregate layers of the ridges protrude on the same side toward the wearer's skin to enhance the effects of the feel, fit and leakproofness. Buell does not disclose the ridges comprising two fiber aggregate layers protruding on the same side. Applicants submit that neither of the references nor their combination teaches the combination of elements described in claim 4.

Furthermore, it is not at all clear that it would be obvious to one of ordinary skill in the art to utilize the ridges of Buell in the Hedlund et al. device. The Examiner has not provided adequate motivation for one skilled in the art to transfer this type of material onto the Hedlund et al. device. Without such a teaching, Applicants submit that the combination would not be obvious. Accordingly, Applicants submit that claim 4 is allowable.

Claims 8 and 9 depend from claim 4 and as such are also considered to be allowable. In addition claim 8 requires that the extensible portion is wavy in the longitudinal section. Claim 9 requires that the upright portion connect to the

middle of the extensible portion. Accordingly, these claims are additional allowable.

Claims 5-7 stand rejected under 35 U.S.C. § 103 as being obvious over Hedlund et al. and Buell as supplied above and further in view of Fell et al. (U.S. Patent 5,769,835). This rejection is respectfully traversed.

The Examiner cited the Fell et al. reference to teach the idea of two layers of fibrous aggregates. However, even if the teachings of this reference were added to the combination of Hedlund et al. and Buell as applied above, Applicants submit that the limitations of claim 4 as well as dependent claims 6-7 would not be met. Accordingly, these claims are likewise considered to be allowable.

Applicants have also added claims 10 and 11 to describe further features of the invention. These claims point out that the absorbent article is fixed to underwear in use as described on page 8, line 26 of the specification. Thus, this limitation excludes items such as disposable diapers which are not fixed to underwear. It is further noted that page 12 of the specification no longer describes disposable diapers.

Conclusion

In view of the above remarks, it is believed that the claims clearly distinguish over the patents relied on by the Examiner either alone or in combination. In view of this, reconsideration of the rejections and allowance of all the claims are respectfully requested.

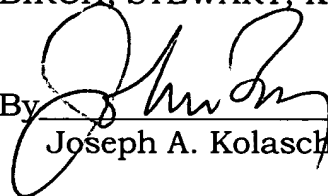
Appl. No. 10/056,485

In the event that there are any outstanding matters remaining in this application, the Examiner is invited to contact Robert F. Gnuse at (703) 205-8000 in the Washington, D.C. area.


If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment(s)